

CLAIMS

1. The use of an inhibitor of  $11\beta$ -reductase in the manufacture of a medicament for the control of 11-keto steroid conversion to  $11\beta$ -hydroxysteroid in vivo.

5        2. The use according to claim 1, for the control of cortisone conversion into cortisol in humans.

3. The use according to claim 2, for lowering hepatic cortisol concentration.

4. The use according to claim 3, for inhibiting  
10 hepatic gluconeogenesis.

5. The use according to claim 2, for lowering intracellular cortisol concentration.

6. The use according to claim 5, for increasing insulin sensitivity in adipose tissue.

15       7. The use according to claim 5, for increasing insulin sensitivity in muscle.

8. The use according to claim 5, for the prevention or reduction of neuronal dysfunction or loss/cognitive impairment due to glucocorticoid potentiated neurotoxicity  
20 or neural dysfunction or damage.

9. The use of an inhibitor of  $11\beta$ -reductase in the manufacture of a medicament for producing multiple therapeutic effects in a patient to whom the medicament is administered, said therapeutic effects including an  
25 inhibition of hepatic gluconeogenesis, an increase in insulin sensitivity in adipose tissue and muscle, and the prevention of or a reduction in neuronal dysfunction, damage or loss due to glucocorticoid potentiated neurotoxicity.

10. The use according to any preceding claim, for the treatment of diabetes mellitus, impaired glucose tolerance, or glucocorticoid associated cognitive or affective disorder.

5 11. The use according to any preceding claim, in which the  $11\beta$ -reductase inhibitor is carbenoxolone ( $3\beta$ -(3-carboxypropionyloxy)- $11$ -oxo-olean-2-en 30-oic acid), or a pharmaceutically acceptable salt thereof.

12. A method of treatment of a human or animal patient  
10 suffering from a condition selected from the group consisting of: hepatic insulin resistance, adipose tissue insulin resistance, muscle tissue insulin resistance, neuronal loss due to glucocorticoid potentiated neurotoxicity, and any combination of the aforementioned  
15 conditions, the method comprising the step of administering to said patient a medicament comprising a pharmaceutically active amount of an inhibitor of  $11\beta$ -reductase.

13. A method according to claim 12, wherein said inhibitor is selected from the group consisting of  
20 carbenoxolone ( $3\beta$ -(3-carboxypropionyloxy)- $11$ -oxo-olean-2-en 30-oic acid), and pharmaceutically acceptable salts of carbenoxolone.